



Generate Collection

L18: Entry 6 of 13

File: USPT

Jun 13, 1989

DOCUMENT-IDENTIFIER: US 4839171 A

TITLE: Composition for treating impaired lactation

Brief Summary Text (5):

Normal milk contains protein, fat, lactose, minerals-electrolytes, vitamins and water. Of these milk ingredients, lactose is considered to be the primary milk ingredient which controls the amount of milk that is produced by the mammary gland. The exact biological manner in which lactose controls milk production is not totally understood; however, the main mechanism of action is through its osmotic pressure action. The positive osmotic pressure of the blood and tissues surrounding the alveoli of the udder forces blood fluid into the secretory cells of the alveoli. These cells convert the blood fluids and nutrients into milk and push the milk into the alveolar cavities which are grape-like in structure. In the normal udder, oxytocin causes a contraction of the alveolar capsules which releases or lets down the milk to the nursing piglet. The emptied alveolar capsule has a negative osmotic pressure which then again stimulates milk formation and storage. This process is constantly repeated without interference in high producing sows and gilts.